AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT	1. CONTRACT ID CODE K	PAGE 1 OF 23

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
0003	17 November 2004	SP0600-04-0561	

6. ISSUED BY CODE SCO600	7. ADMINISTERED BY (*If other than Item 6*) CODE
DEFENSE ENERGY SUPPORT CENTER 8725 JOHN J. KINGMAN ROAD, SUITE 3830 FT. BELVOIR, VA 22060-6222 FAX (703) 767-2382 BUYER/SYMBOL – MARTHA GRAY/DESC-EA PHONE (703) 767-9415 P.P. 8.2	

8. NAME AND ADDRESS OF CONTRACTOR (*NO., street,city,county,State,and ZIP Code*)		9a. AMENDMENT OF SOLICITATION NO.
	X	SP0600-04-R-0110
		9b. DATED *(SEE ITEM 11)* June 30, 2004
		10a. MODIFICATION OF CONTRACT/ORDER NO.
		10b. DATED *(SEE ITEM 13)*

11. **THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

[X] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers
[ ] is extended, [X] is not extended

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning __1__ copies of the amendment;(b) By acknowledging receipt of this amendment on each copy of the offer submitted; or(c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. **FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.** If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. **ACCOUNTING AND APPROPRIATION DATA** *(If required)*

13. **THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A. I2.05 CHANGES-FIXED PRICE (AUG 87)
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: FAR 43.01
	OTHER *(Specify type of modification and authority)*

E. **IMPORTANT:** Contractor [ ] is not, [ ] is required to sign this document and return __ copies to the issuing office.

14. **DESCRIPTION OF AMENDMENT/MODIFICATION** *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

The purpose of this modification is to **EXTEND** the solicitation closing date for the electrical system from November 29, 2004 to December 14, 2004 at 3:00 p.m. (EST) Fort Belvoir, VA 22060-6222 and to replace Section J1, Fort Monmouth Electrical Distribution System in its entirety.

Please see the following pages.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (*Type or print*)		16A. NAME OF CONTRACTING OFFICER Kerri B. Chambers	
15B. NAME OF CONTRACTOR/OFFEROR BY _____ *(Signature of person authorized to sign)*	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY_____ *(Signature of Contracting Officer)*	16C.DATE SIGNED

Amendment 0001 deletes Attachment J1 – Fort Monmouth Electrical Distribution System in its entirety and replaces with the following Section J1 Attachment:

ATTACHMENT J1

Fort Monmouth Electrical Distribution System

TABLE OF CONTENTS

List of Tables

J1 Fort Monmouth Electrical Distribution System

J1.1 Fort Monmouth Overview

Fort Monmouth is a U. S. Army installation located approximately fifty (50) miles south of New York City, New York. Established in 1917, the Installation was initially designated Signal Corps Camp, Little Silver, before the name was changed to Camp Alfred Vail, in honor of the New Jersey inventor. In 1925, the Post was officially designated Fort Monmouth, in honor of the men who had died on the nearby Revolutionary War battlefield. Today, Fort Monmouth is home to the U.S. Army Communications-Electronics Command, the Program Executive Office Command, Control, Communications, Tactical (PEO-C3T) Program Executive Office Intelligence, Electronics, Warfare & Sensors (PEO-IEWS), the U.S. Military Academy

Preparatory School, and the Communications & Electronics Research Development & Engineering Center (CERDEC). The Installation's population includes approximately 546 active duty military personnel, 4,700 civilian Government employees, 2,000 permanent Government contractors and about 1,092 military dependents. Fort Monmouth covers an estimated 637 acres at the Main Post and 464 acres at the Charles Wood Area, located 1½ miles away.

J1.2 Electrical Distribution System Description

J1.2.1 Electrical Distribution System Fixed Equipment Inventory

The Fort Monmouth electrical distribution system consists of all appurtenances physically connected to the distribution system between the points of demarcation separating Government ownership of the distribution system from the electric supplier and separating the distribution system from end-users. The system may include, but is not limited to, circuit breakers, transformers, circuits, protective devices, utility poles, ductbanks, switches, street lighting fixtures, and other ancillary fixed equipment. The actual inventory of items sold will be conveyed to the Contractor using the Bill of Sale (sample shown in Attachment J42) at the time the system is transferred.

The following description and inventory is included to provide the Contractor with a general understanding of the size and configuration of the distribution system. The description and inventory were developed based on best available data.

The Offeror shall base its proposal on site inspections, information in the technical library, and other pertinent information, as well as the following description and inventory. If after award the Offeror identifies additional inventory not listed in Paragraph J1.2.1.5, the Offeror may submit to the Contracting Officer a request for an equitable adjustment. If the Offeror determines that the inventory listed in Paragraph J1.2.1.5 is overstated, the Offeror shall report the extent of the overstatement to the Contracting Officer, who will determine an equitable adjustment.

J1.2.1.1 System Description

Fort Monmouth currently purchases wholesale electric power from General Public Utilities Corporation (GPU) at two delivery points: East Substation located in the south-central portion of the Main Post and at a 34.5-kV metering station located in the Charles Wood Area. The existing electrical distribution system consists of:

- Four 34.5-4.16-kV distribution substations (East Substation Bldg 978, North Substation, West Substation Bldg 1231 and Pulse Power Center Substation, Bldg 2707.);
- One 34.5-12.47-kV distribution substation (CWA Substation, Building 2701);

- One 12.47-4.16-KV distribution substation (Building 2700);
- Approximately 25.8 circuit miles of primary distribution line;
- Approximately 5.98 circuit miles of secondary lines;
- Approximately 1,000 street lights;
- Approximately 20.4 circuit miles of lighting conductor; and
- 459 building services.

East Substation supplies the Main Post via an automatic throw-over switch connecting a bank of two 5000/6250 kVA, 3-phase transformers. It is supplied from Jersey Central Power and Light Company's (JCP&L) 34.5 kV transmission line. The 34.5 kV-line terminates at a JCP&L-owned and maintained substation located adjacent to the East Substation. The JCP&L substation consists of one high-voltage structure and one oil circuit breaker located below the Army's high-voltage structure. A third 5000/6250 kVA 34.5-4.16 kV power transformer with automatic load tap changer was installed in 1997 as a spare to allow one of the other transformers to be taken out of service for maintenance. This third transformer is connected to the main switchgear via a tie breaker. The transformer is kept energized, with no load, and could be utilized should a problem occur with the 3-MVA transformer or at the West Substation.

The transformer secondaries, 4160/2400 volts, are connected through a voltage regulator for each bank to a switchgear bus protected by two main circuit breakers equipped with seven breakers and a center tie breaker. The voltage is then distributed to the Installation via aerial pole lines, except in the more recently constructed areas where a duct and manhole system is used. The Army owns all the switchgear and distribution feeder lines throughout the Installation.

Most buildings in the Main Post are served at 208/120 volts three phase or 120/240 volts single phase with secondary service drops from pole-mounted transformers. Larger buildings are served from pad-mounted transformers adjacent to the building or from transformers installed in vaults in the building.

A West Substation was constructed as part of a Corps of Engineers contract to provide power to the 1200 area buildings on the West Side of the Main Post. This contract was completed in 1990. This substation is fed from a 34.5 kV aerial transmission line originating from the East Main Post Substation. The aerial line consists of three #350 MCM Aluminum conductors, fused at 400 amps, which traverse the Main Post to the 1200 area. The West Substation, as constructed, consisted of a 7500 kVA, 4160/2400-volt load tap changing transformer with oil containment pit and a walk-in metal clad switchgear enclosure. A 1200 amp protects the transformer primary,

35 kV oil circuit breaker. There are eight outgoing feeders from the original switchgear. Some buildings have dual feeder capability. The distribution system is an underground system, comprised of concrete-encased ductbanks and manholes. Splices in the manholes are performed with modular type splices, which offer quick sectionalizing in the event of system failure.

An addition to the West Substation was constructed as part of a Corps of Engineers contract in 1994. The addition consisted of another 7500 kVA 4160/2400 volt, load tap changing transformer with oil containment pit and walk-in type metal clad switchgear enclosure. The transformer primary is protected by a 1200 amp, 35 kV, SF6 breaker. A tie breaker was installed between the two switchgear sections, to facilitate maintenance to individual transformers and to pick up total load in the event of individual transformer failure. The tie breaker is normally open during operation of the substation.

There are four outgoing feeders from the additional set of switchgear. Some buildings have a dual feeder capability through the use of pad-mounted sectionalizing switches. The distribution system is an underground system, utilizing concrete-encased ductbanks and manholes. The underground feeder consists of 350 MCM, XLP, 5 kV conductors. The reuse of the existing ductbank and manhole system on the Avenue of Memories – the main avenue traversing the Main Post – enables Fort Monmouth to backfeed the East Main Post Substation from the West Substation and vice versa, in the event of substation transformer failure. The backfeed can only accommodate 400 amps of additional load, so energy conservation measures would need to be taken and nonessential load sectionalizing performed in order to avoid overloading the feeders. Both 7500 kVA transformers in the West Substation have tank-mounted fans, which can increase their capacity to 10,500 kVA.

An additional 34.5 kV feeder was installed in 1995 to feed the housing quarters, Research Development and Administration buildings on the East Side of the Main Post. This feeder also serves to alleviate the East Substation of overloads during the summer peak season. This new feeder was tapped off the 34.5 kV feeder, supplying power to the West Substation. The feeder consists of 3 #1/0, 35 kV conductors in a underground ductbank, feeding a 3 MVA 34.5-5 kV padmounted transformer, with 400 amp, 5 kV padmounted switchgear. From the switchgear, a concrete encased underground ductbank carries the feeders to the area along Parkers Creek where the underground feeders switch to an aerial distribution through riser poles. Primary service to buildings consists of underground primary conductors feeding padmounted transformers. Secondary services from the transformers to the buildings are comprised of underground conductors in ductbanks. In case of transformer failure in the 3 MVA substation, an alternate feed can be provided from the East Substation feeder #4, through aerial switching.

Service to the Charles Wood Area, which is approximately 1½ miles west of the Main Post, is by way of an Army owned 34.5-12.47 kV unit type substation. The substation is served by a 34.5 kV transmission line, which originates at the 34.5 kV metering station located approximately 1,200 feet south of the substation.

The Charles Wood 34.5 kV metering station consists of 1200 amp, 34.5 kV indoor switchgear consisting of two feeder breakers and one non-automatic source breaker.

The Charles Wood electrical distribution system was upgraded from 5 kV to 12.5 kV distribution under a Corps of Engineers contract completed in 1994. The contract consisted of installing a 34.5-12.5 kV unit type substation with two 10/11.2/14-MVA 34.5-12.5 kV transformers and 12.5 kV metal enclosed, walk-in type distribution switchgear with vacuum type circuit breakers for the transformer feeders. Two overhead and two underground 12.5 kV distribution feeders originate from this substation along with two underground 12.5 kV circuits that feed a 12.5-4.16 kV substation located adjacent to Building 2700.

The Building 2700 12.5 kV substation consists of two 7.5 MVA 12.5-5 kV transformers that are oil cooled and have provisions for future air-cooling. With the present summer peak loading of Building 2700 being approximately 4000 kVA, one of the transformers can handle the load with the other being used as a backup, in the event of transformer failure or in the case transformer maintenance.

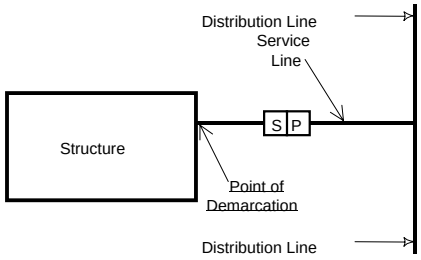
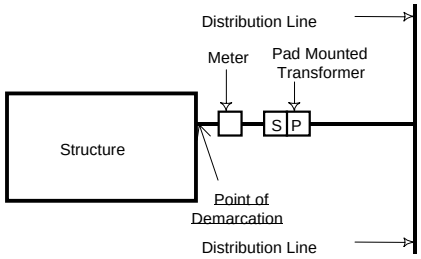
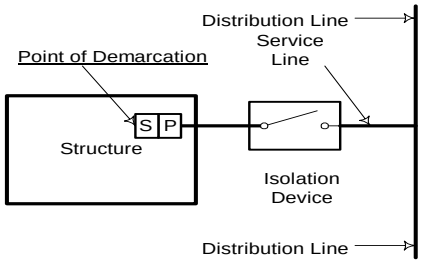
The aerial distribution system is fed from two feeders originating at the 12.5 kV Substation and consisting of 3 #2/0 copper conductors with neutral, which feeds office buildings and housing areas. Service entrances to buildings consist of underground primary conductors, coming off riser poles and feeding pad mounted transformers with underground secondary service entrance conductors. The Megill and Olmstead Housing areas have been converted to an Underground Residential Distribution (URD) type of electrical distribution system utilizing pad-mounted transformers. The Olmstead Housing area is fed from both feeders with one feeder being normally open through a sectionalizing switch. In the event of primary feeder failure, the switch can be closed to enable the area to be energized from the alternate feeder. The Howard Commons Housing area electrical distribution system consists of an aerial distribution system with underground service entrances to buildings. Service entrances consist of main breaker equipped electrical metering gear with a meter for each living quarters. In case of Fort Monmouth primary feeder failure, the area can be backfed by using the utility’s feeder, through aerial switching.

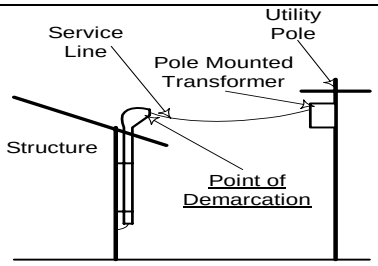
J1.2.1.2 Points of Demarcation

The point of demarcation is defined as the point on the distribution system where ownership changes from the Grantee to the building owner. This point of demarcation will typically be at the point the utility enters a building structure or the load side of a transformer within a building structure. The table below identifies the type and general location of the point of demarcation with respect to the building for each scenario. During the operation and maintenance transition period, concurrence on specific demarcation points will be documented during the joint inventory of facilities.

Table 1 identifies the type of service and general location of the points of demarcation with respect to each building served by the distribution system.

TABLE 1
Points of Demarcation
Electrical Distribution System, Fort Monmouth, New Jersey

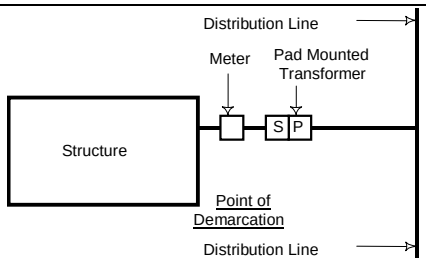
Point of Demarcation	Applicable Scenario	Sketch
Point of demarcation is the structure wall. For Residential application (RCI) see Table 2.	Pad-Mounted Transformer located outside structure with underground service to the structure and no meter exists.	
Point of demarcation is the structure wall.	Pad-Mounted Transformer located outside structure with underground service to the structure and meter exists.	
Secondary terminal of the transformer inside of the structure	Transformer located inside structure with or without an isolation device and with or without a meter. Note: Utility Owner must be granted 24-hour access to transformer room.	

Point of Demarcation	Applicable Scenario	Sketch
Point of demarcation is the point where the overhead conductor is connected to the weather head. For Residential application (RCI) see Table 2.	Pole-Mounted Transformer located outside structure with secondary attached to outside of structure with no meter.	

J1.2.1.3 Unique Points of Demarcation

The points of demarcation (POD) delineating the responsibilities of the private partner who manages residential housing for Fort Monmouth and other Fort Monmouth buildings other than housing are listed below in **Table 2**.

TABLE 2
Unique Points of Demarcation
Electrical Distribution System, Fort Monmouth, New Jersey

Point of Demarcation	Applicable Scenario	Sketch
Point of demarcation is the meter.	Privatized residential housing	

J1.2.1.4 Condition Assessment

The condition of the underground electrical distribution facilities is considered good as most of the underground facilities are relatively newer. Many of the overhead facilities are nearing the end of their design lives. Fort Monmouth will require that overhead facilities be replaced with underground facilities as they are replaced due to obsolescence.

J1.2.1.5 Inventory

Table 3 provides an inventory of the electrical distribution system components being privatized. The system will be sold in an “as is, where is” condition without any warrant, representation, or obligation on the part of the Government to make any alterations, repairs, or improvements. All

ancillary equipment attached to and necessary for operating the system, though not specifically mentioned here in, is considered part of the purchased utility.

Fort Monmouth is currently in the process of housing privatization through the Residential Communities Initiative (RCI). The anticipated result of the RCI program is that the electrical distribution system at North and South Pine Brook housing areas will be transferred to the RCI contractor. In addition the Olmstead family housing area is currently being demolished in preparation for a homeland defense facility. In the remaining family housing areas impacted by RCI, the service lines and pad mount transformers will become the property and the responsibility of the owner. The inventory in **Table 3** reflects the system configuration at the time of the transfer of the electrical distribution system to a private owner.

TABLE 3
Fixed Inventory
Electrical Distribution System, Fort Monmouth, New Jersey

Component	Quantity	Unit	Approximate Year of Construction
Overhead			
3 Phase - Open Wire, Large	4.12	MI	1982
3 Phase - Open Wire, Small	8.02	MI	1973
3 Phase - Open Wire, Small	0.26	MI	1979
1 Phase – Open Wire	0.63	MI	1969
Secondary	3.86	MI	1975
Gang-Operated Air Break Switches	8	EA	1974
Underground			
3 Phase - Large	8.01	MI	1990
3 Phase - Small	3.92	MI	1986
1 Phase	0.38	MI	1984
Primary sect. switches	15	EA	1989
Transformer Switches	1	EA	1981
Secondary	2.12	MI	1987
Transformers, Pole Mount			
15 kVA & smaller - 120 / 240 v	14	EA	1964
15 kVA & smaller - 120 / 240 v	2	EA	1979
25 kVA - 120 / 240 v	70	EA	1967
25 kVA - 120 / 240 v	4	EA	1979
37.5 kVA - 120 / 240 v	27	EA	1968
37.5 kVA - 120 / 240 v	2	EA	1979

Component	Quantity	Unit	Approximate Year of Construction
50 kVA - 120 / 240 v	67	EA	1967
75 kVA - 120 / 240 v	35	EA	1968
100 kVA - 120 / 240 v	17	EA	1968
167 kVA - 120 / 240 v	6	EA	1969
Transformers, Pad Mount			
1 Phase - 50 kVA & smaller - 120 / 240 v	4	EA	1997
1 Phase - 75 kVA - 120 / 240 v	10	EA	1981
1 Phase – 100 kVA - 120 / 240 v	1	EA	1972
1 Phase – 167 kVA - 120 / 240 v	4	EA	1974
3 Phase - 75 kVA & smaller - 120 / 208 v	25	EA	1981
3 Phase - 112 kVA - 120 / 208 v	2	EA	1977
3 Phase - 150 kVA - 120 / 208 v	9	EA	1978
3 Phase - 225 kVA - 120 / 208 v	16	EA	1982
3 Phase - 300 kVA - 120 / 208 v	14	EA	1988
3 Phase - 500 kVA - 120 / 208 v	15	EA	1988
3 Phase - 750 kVA - 120 / 208 v	8	EA	1984
3 Phase - 1000 kVA - 120 / 208 v	2	EA	1989
Transformers, Interior Mount			
1 Phase – 75 kVA - 120 / 240 v	3	EA	1985
3 Phase - 225 kVA - 120 / 208 v	1	EA	1955
3 Phase - 300 kVA - 120 / 208 v	5	EA	1987
3 Phase - 500 kVA - 120 / 208 v	7	EA	1972
3 Phase - 750 kVA - 120 / 208 v	6	EA	1982
3 Phase - 1000 kVA - 120 / 208 v	4	EA	1987
3 Phase – 1333 kVA - 120 / 208 v	4	EA	1955
3 Phase - 1500 kVA - 120 / 208 v	1	EA	1955
Services			
3 Phase	359	EA	1980
1 Phase	100	EA	1980
Street/Security/Parking Lot Lights			
Fixtures	1,000	EA	1980
Poles	650	EA	1980
Conductor – Overhead	8.52	MI	1975
Conductor – Underground	11.84	MI	1987
Substations			

Component	Quantity	Unit	Approximate Year of Construction
East Substation			
4.16 kV Structure/Buswork	3	Bay	1967
4.16 kV OCB/Switchgear	10	EA	1952
Voltage Regulators	6	EA	1997
34.5/4.16 Power Transformers (2)	10	MVA	1952
34.5/4.16 Power Transformer (1)	5	MVA	1996
Block & Metal Control Buildings	900	SF	1952
West Substation			
4.16 kV Structure/Buswork	3	Bay	1989
4.16 kV OCB/Switchgear	13	EA	1992
35 kV Oil Circuit Breaker	2	EA	1997
34.5/4.16 Power Transformer (1)	7.5	MVA	1989
34.5/4.16 Power Transformer (1)	7.5	MVA	1996
3 MVA Substation			
5 kV Pad Mounted Switchgear	1	EA	1995
34.5/4.16 Power Transformer (1)	3	MVA	1995
Charles Wood Metering Station			
34.5 kV OCB/Switchgear	3	EA	1992
Charles Wood Main Substation			
34.5 kV OCB/Switchgear	9	EA	1992
Substation Capacitors	2,400	kVar	1992
34.5/12.5 Power Transformers (2)	20	MVA	1992
Pad Mount Switch	1	EA	1992
Charles Wood Bldg 2700 Substation			
12.5/4.16 Power Transformers (2)	15	MVA	1992

Notes:

EA = each	kVar =
MVA = megavolt ampere	kV = kilovolt
MI = miles	kVA = kilovolt ampere
SF = square feet	OCB = oil circuit breaker

J1.2.2 Electrical Distribution System Non-Fixed Equipment and Specialized Tools

Table 4 lists other ancillary equipment (spare parts), and **Table 5** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment, vehicles, and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment, vehicles, and tools. The successful Contractor shall provide any and all equipment, vehicles, and tools, whether included in the purchase or not, to maintain a fully operating system under the terms of this contract.

TABLE 4
Spare Parts
Electrical Distribution System, Fort Monmouth, New Jersey

Quantity	Item	Make/Model	Description	Remarks
Fort Monmouth maintains an inventory of spare parts for the electrical distribution system. Contents of the inventory vary as items are used and/or purchased. Availability of this inventory to the new owner will be negotiated before or during the transition period.				

TABLE 5
Specialized Vehicles and Tools
Electrical Distribution System, Fort Monmouth, New Jersey

Quantity	Item	Make/Model	Description	Remarks
No specialized vehicles or tools are included with the Fort Monmouth electrical distribution system.				

J1.2.3 Electrical Distribution System Manuals, Drawings, and Records

Table 6 lists the manuals, drawings, and records that will be transferred with the system.

TABLE 6
Manuals, Drawings and Records
Electrical Distribution System, Fort Monmouth, New Jersey

Quantity	Item	Description	Remarks
Fort Monmouth maintains a limited collection of technical manuals, drawings, and records on the installed components of the electrical distribution system. This information will be transferred to the new owner during the transition period. System maps will be available in the bidder's library.			

J1.3 Specific Service Requirements

The service requirements for the Fort Monmouth electrical distribution system are as defined in Paragraph C, *Description/Specifications/Work Statement*. The following requirements are specific to the Fort Monmouth electrical distribution system and are in addition to those found in Paragraph C. If there is a conflict between requirements described below and Paragraph C, the requirements listed below take precedence over those found in Paragraph C.

J1.3.1 Digging Permits

J1.3.1.1 State of New Jersey Provided Permits

All entities wanting to dig, drill or excavate at Fort Monmouth shall participate in the mandated State of New Jersey digging permit process. The Contractor shall be responsible for all repairs, costs, and damages due to digging, drilling or excavation by others for which he did not mark his utilities.

J1.3.1.2 Fort Monmouth-Provided Permits

The Contractor shall first obtain digging permits directly from DPW for utilities owned by the Government before any drilling, digging, or excavation is undertaken. The Contractor shall provide a completed request for permit to the Fort Monmouth DPW for each permit not earlier than 15 days and not later than 5 days prior to the requested digging date. A digging permit for a specified area of excavation expires 30 days after the issue date; Contractor must re-apply for a new permit to perform excavation in the area if the excavation was not started within the 30-day period. Permits will identify all underground utilities within 1.5 m (5 feet) of the designated area. Contractor shall be responsible for all repairs, costs, and damages due to his excavations that fail to comply with the DPW digging permit process, including excavations extending beyond areas that have been cleared for excavation.

J1.3.2 Inspection and Maintenance Program

The Contractor shall develop and implement a system inspection and maintenance program to assure continued operation of the electrical distribution system IAW, the National Electrical Safety Code and the National Electrical Code. The Contractor shall determine which switches and protective devices are necessary to control the distribution of electrical energy, respond to outages and emergency situations, isolate the system, restore electrical service, and otherwise as

necessary to meet the requirements of this contract. The Government reserves the right to review the Contractor's system maintenance records.

J1.3.3 Emergency Response

The Contractor shall respond with a knowledgeable individual to emergency problems within 15 minutes of notification during duty hours and within one hour during non-duty hours. Additionally, repair crews must be on scene within one hour during duty hours and within two hours during non-duty hours. Duty hours are defined as the hours from 0700 until 1730.

J1.3.4 Meters

The Contractor shall operate, maintain, and calibrate all secondary meters IAW applicable standards and regulations. RCI Contractor shall operate, maintain and calibrate all secondary meters inside the RCI Housing demarcation area. The Government reserves the right to review the Contractor's meter and maintenance and calibration records. Contractor shall install sub-metering at the riser poles feeding the RCI Housing Areas, to obtain meter readings that will be used to check the accuracy of the RCI Housing metering and also to provide load profiles to DPW.

J1.3.4.1 Meter Reading

Fort Monmouth currently reads meters manually. The Contractor shall read meters each month as defined in Paragraph J1.5.

J1.3.5 Fire Control and Safety

The Contractor shall abide by Fort Monmouth fire protection requirements. The utility system purchased by the Contractor may include facilities. These facilities may or may not include fire alarm systems. Where required by federal, state or local regulation, the Contractor shall maintain the fire alarm system for all facilities owned and operated by the Contractor. The Contractor shall permit Fire Department personnel access to their facilities to perform fire inspections and emergency response.

J1.3.6 Restricted Access

The Contractor shall coordinate with and obtain written approval from Fort Monmouth for restricted area access.

J1.3.7 Crisis Situations

IAW Paragraph C.9.8, *Exercises and Crisis Situations Requiring Utility Support*, the Contractor shall provide support as directed by Fort Monmouth DPW or equivalent agency for exercises and crisis situations. Contractor shall submit Emergency Response Plans for approval by the Government for all Exercise and Crisis situations IAW C.9.8.

J1.3.8 Installation Transformation Requirements

Fort Monmouth is currently undergoing a major transformation. Most notable among the changes occurring at the Installation is the housing privatization (Residential Community Initiative or RCI), leasing of properties to private entities (Enhanced Use Lease or EUL), installation of co-generation equipment (Energy Savings Performance Contract or ESPC), upgrade of communication network (Installation, Information, Infrastructure Modernization Program or I3MP) and new construction and modernization of existing facilities (Military Construction or MCA). The massive level of projects underway approved for construction and in the planning process will require flexibility of the utility system owner. Offerors will be required in both the Technical and Price Proposals to provide information on how they will handle changes occurring at the Installation. Included in this information will need to be a preplanned methodology to alter (up or down) price levels to reflect changes caused by know and unknown Installation changes.

Of the above mentioned Installation transformations, the RCI program is expected to precede utilities privatization. The RCI contractor will take ownership of the electric meters in all housing areas, except the North and South Pine Brook areas, and the point of demarcation will become the line side of the meter. The North and South Pine Brook housing areas are located on the CWA boundary and will be totally separated from the Installation electric distribution system.

J1.3.9 Work Space Requirements

The potential electric utility service contractor may negotiate for lease of the lease of the existing high voltage warehouse and equipment storage yard. No other space will be made available for electric utility support functions. If the contractor decides to lease the Government facilities utilities, except telephone, shall be provided and billed at rates consistent with other non-Government tenants.

J1.4 Current Service Arrangement

Fort Monmouth currently purchases wholesale electric power from General Public Utilities Corporation (GPU) at two delivery points, East Substation located in the south-central portion of the Main Post and at a 34.5 kV metering station located in the Charles Wood Area.

J1.5 Secondary Metering

Between the point of delivery and the end user points of demarcation, the Contractor shall own the existing meters, and shall install additional meters at new and upgraded locations as directed by the Contracting Officer. The Contractor shall install or cause to have installed utility meters as requested by the Contracting Officer to include accessories that will ensure compatibility with the approved data capturing system as approved by the Contracting Officer.

J1.5.1 Existing Meters

Table 7 lists the existing (at the time of contract award) meters that will be transferred to the Contractor.

The Contractor shall provide meter readings for all secondary meters IAW Paragraph C.3.3, *Metering*, and J1.6, *Monthly Submittals*.

TABLE 7
Existing Secondary Meters
Electrical Distribution System, Fort Monmouth, New Jersey

Facility	Building No.
There are currently 54 electric meters at Fort Monmouth. A list of these meters will be included in the Technical Library.	

J1.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 8**. New secondary meters shall be installed IAW Paragraphs C.3.3.1, *Future Meters*, and C.13, *Operational Transition Plan*. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3.3, *Metering*, and J1.6 below.

TABLE 8
New Secondary Meters
Electrical Distribution System, Fort Monmouth, New Jersey

Facility	Building No.
All buildings, not currently metered, will require new secondary metering. Metering shall be connected through LAN network to enable remote reading. The Technical Library will contain a list of future metering requirements.	

J1.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. **Invoice**. (IAW Paragraph G.2, *Submission and Payment of Invoices*). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. The Contractor's monthly invoice shall include segregated costs IAW with each CLIN. Costs shall be segregated into two categories: costs associated with Housing areas and costs associated with non-Housing areas. The Contractor shall provide sufficient supporting documentation with each monthly invoice to substantiate all costs included in the invoice for each CLIN as approved by the Contracting officer. The proposed system of accounts shall be made available in electronic format as directed by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to:

   Name: DIRECTORATE OF PUBLIC WORKS
   ATTN SELFM-PW-FMD (Mr. Dion Johnson)
   Address: Riverside Avenue, Bldg 167
   Fort Monmouth, New Jersey 07703-5108
   Phone number: (732) 532-4119

2. **Outage Report**. The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to:

   Name: DIRECTORATE OF PUBLIC WORKS
   ATTN SELFM-PW-FMD (Mr. Michael Maier)
   Address: Riverside Avenue, Bldg 167
   Fort Monmouth, New Jersey 07703-5108
   Phone number: (732) 532-3543

3. **Meter Reading Report**. The monthly meter reading report shall show the current and previous month's readings for all secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to:

Name:	DIRECTORATE OF PUBLIC WORKS ATTN SELFM-PW-FMD (Mr. Dion Johnson)
Address:	Riverside Avenue, Bldg 167 Fort Monmouth, New Jersey 07703-5108
Phone number:	(732) 532-4119

J1.7 Energy Saving Projects

IAW Paragraph C.3.4, *Energy and Water Efficiency and Conservation*, the following projects have been implemented by the Government for conservation purposes.

- Energy Savings contract with General Public Utilities Corporation (GPU) to include Geothermal HVAC installation in Buildings 2705, 1077, 1078, chiller upgrades in Building 2706 and boiler upgrades in Buildings 1075 and 2700. Contract number GSOOP96BSD0037.

- Energy Savings Performance Contract (ESPC) with AMERESCO, Phase 1 to include Geothermal HVAC installation, lighting upgrades, post wide energy management and control system and work management program installation. Contract number DE-AM36-990R22701. (There is also a proposed Phase 2, which includes additional Geothermal HVAC installations and a biomass to electricity conversion project. Phase 2 is still in the concept stage.)

J1.8 Service Area

IAW Paragraph C.4, *Service Area*, defines the service area as all areas within the Fort Monmouth boundaries.

J1.9 Off-Installation Sites

No off-installation sites are included in the privatization of the Fort Monmouth electrical distribution system.

J1.10 Specific Transition Requirements

IAW Paragraph C.13, *Operational Transition Plan*, **Table 9** and **Table 10** provide a list of service connections, disconnections and improvements required upon transfer.

TABLE 9
Service Connections and Disconnections
Electrical Distribution System, Fort Monmouth, New Jersey

Location	Description
There are no service connections or disconnections required upon transfer of the Fort Monmouth electrical distribution system.	

TABLE 10
System Improvement Projects
Electrical Distribution System, Fort Monmouth, New Jersey

Location	Description
Buildings 270,271 and 360	Existing aerial feeder and overhead transformers shall be converted to an underground primary feeder with padmounted transformers. The new feeder shall come from the North Substation feeder located along Parker Creek/Lockwood Avenue. Existing aerial feeders and the line running along Carty Avenue alleyway shall be removed.
Water and wastewater facilities	New underground electrical services shall be installed to water and wastewater facilities if existing electric service is aerial.
Softball field adjacent to Dean field and Dean field baseball field	Install new sports lighting poles, fixtures and electrical feed on Softball field. Remove existing poles, fixtures, aerial transformers, 5KV feeder, convert system to 480 volts and install new sports lighting poles and fixtures on Dean field.
Building 167 Softball field	Install new sports lighting poles, fixtures and electrical feed.
800 area athletic field	Install new stadium lighting and electrical feed.
Building 286	Replace existing street lighting in Russell Hall area with historic type lighting.
Building 1075	Install new street and parking lot lighting in Patterson Army Health Clinic area.
Building 114	Replace street lighting at Fitness Center area, Building 114.
Laboratory Road, Charles Wood area	Replace street lighting along Laboratory Road.
Wilson Avenue	Replace existing 5KV Arc Circuit lighting feeder with new secondary voltage feeder, east of Wilson Avenue.

Building 2705	Install new parking lot lighting at Building 2705 area.
Building 2000, Gibbs Hall	Replace existing street lighting and install new parking lot lighting in Gibbs Hall parking areas.
Avenue of Memories	Replace existing street lighting on Avenue of Memories.
800 area	Upgrade aerial Feeder #1 from existing #2 copper to 397MCM Hendricks spacer type cable. Feeder provides backfeed to Building 1075, Patterson Army Health Clinic.
1100 area	Replace aerial transformers/services with pad mount transformers and underground service entrances.
900 Area	Buildings 900, 901, 903, 914, 915, 916, 917, 918. Install new underground primary service to new pad mounted transformer and distribution switchgear. Remove existing open type transformer installation and existing vault mounted aerial transformers and fusing.
300 area	Replace existing aerial feeder serving 300 area Lodging/Barracks complex with underground 5KV feeder and pad mounted switchgear. Remove poles and aerial cable/transformers.
Saltzman Avenue	Replace existing 5KV aerial feeder on Saltzman Avenue with an underground 5KV feeder and pad mounted sectionalizing switches. Feeder to be replaced from Wilson to Irwin Avenues.
Building 978, East Substation	The East Substation 41.6KV interior switchgear and outdoor 34.5/4.16KV oil filled transformers and aerial switches have reached the end of their service life, having been installed in the mid-1950's. Complete replacement shall include installation of 3 new 7.5MW transformers with paralleling capabilities, individual 34.5KV switchgear for each transformer and the West Substation feeder. Install a 26 cubicle, 4.16KV indoor switchgear to enable closed transitions between transformers and alternate feeds to the West Substation. Install remote interconnecting controls between the East Substation and West Substation.
Bldg 978, East Substation, Main Post	Install alternate 34.5KV underground feeder to West Substation from East Substation.
Install 300 amp solid blade disconnects on Riser poles for Feeders 1,2,4 and 7	Install new disconnect means on 5KV riser poles for circuit sectionalizing.
Feeder #2, 600 area	Transition aerial Feeder#2 spur currently feeding the 200, 500 and 600 areas including the McAfee Center, to underground distribution due to unsightliness of the aerial feeder along the Avenue of Memories.

Barker Circle Area	Replace the pad-mounted air type sectionalizing switches located in the Barker Circle area with new switches, due to corrosion damage by repeated saltwater infiltration from coastal storms
Feeder#2, 290 area	Install new 2-way ductbank from Feeder#2 riser pole to feed Buidling 283 and ground mounted aerial transformer enclosures serving 290 area buildings. Install new pad mounted transformer with pad mounted distribution switchgear. Existing underground feeder has exceeded its life expectancy at 50+ years of service and could fail during storms or high loading periods.
Feeder#7, 900 area	Install new 2-way ductbank from Feeder#7 riser pole in 900 area to new padmounted transformers with new secondary underground distribution for Buildings 909, 910, 911 and 912. Remove existing aerial ground mounted transformers and fusing/wiring. Existing underground primary feeder has reached end of life expectancy of 50+ years and has been the source of many recent outages.
Feeders W11&W12, West Substation	Replace existing aerial feeder cables, Feeder W11&W12 spur feeding Building 1220 and 200, with an underground feeder. Existing crossarms are deteriorating, dangerous and unsightly.
Buildings 1207,1208,1209,1210	Replace existing indoor oil switches located inside electrical vaults of buildings 1207, 1208, 1209 and 1210 with load break air switches. Switches are obsolete and pose oil spill hazard.
Building 286	Replace existing generator, transfer switch and service entrance panels, Building 286.
400 area	Replace existing aerial feeders and building services with underground 5KV primary, pad mounted transformers and underground service entrances.
Transformers A&B, CWA Substation	Replace existing 14MVA, 34.5/12.5KV transformers A&B, located in the Charles Wood Substation with new units. Transformers have internal leaks and have had numerous repairs to the load tap changer electronic controls.

J1.11 Government Recognized System Deficiencies

Table 11 provides a list of Government recognized deficiencies. The deficiencies listed may be physical deficiencies, functional deficiencies, or operational in nature. If the utility system is sold, the Government will not accomplish a remedy for the recognized deficiencies listed. The Offeror shall make a determination as to its actual need to accomplish and the timing of any and all such deficiency remedies.

Physical and functional deficiencies may require capital to be invested in the system. If any deficiency remedy requires a capital upgrade project, the capital upgrade project shall be proposed according to the following:

- Capital upgrade projects required to bring the system to standard shall be proposed under Schedule 3 – Initial Capital Upgrade(s)/Connection Charge(s).
- Capital upgrade projects required to replace system components shall be proposed in the first years of Schedule 2 – Renewals and Replacements – 50-Year Schedule, and the cost factored into Schedule 1 – Fixed Monthly Charge, for Renewals and Replacements as part of CLIN AA.
- Transition costs shall be proposed as a one-time cost and shall be treated similar to a capital project and included in Schedule 3 – Initial Capital Upgrade(s)/Connection Charge(s).
- Improvements proposed in the operational component of the work shall be included in Schedule 1 – Fixed Monthly Charge as part of CLIN AA.

TABLE 11
System Deficiencies
Electrical Distribution System, Fort Monmouth, New Jersey

System Component	Deficiency Description
Building 293	3 100-kVA pole type transformers sitting on ground in fenced enclosure
Building S-289	3 166-kVA pole type transformers sitting on ground in fenced enclosure
Building 952	3 75-kVA pole type transformers sitting on ground in fenced enclosure
Building 953	3 37.5-kVA pole type transformers sitting inside building
Building T-904	3 166-kVA pole type transformers sitting on ground in fenced enclosure
Building 260	3 25-kVA pole type transformers sitting on short stand in fenced enclosure
Building 260	1 40-kW constant current transformer located on short stand in fenced enclosure
Building 901	3 167-Kva Pole type transformers sitting on ground in fenced enclosure
East Substation	1 10-kVA pole type station service transformer pad mounted